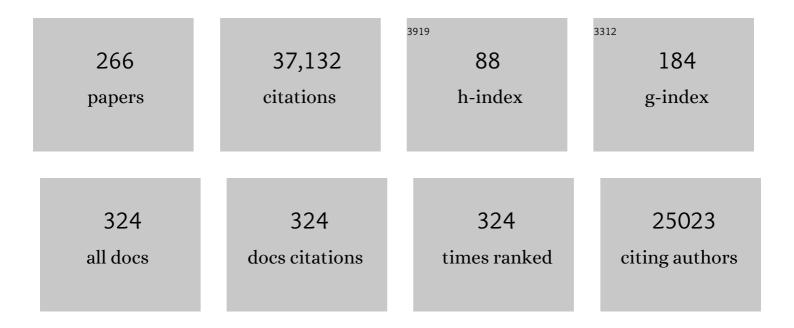
Jaume Flexas

List of Publications by Year in descending order

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INTIME FLEXAS

#	Article	IF	CITATIONS
1	Desiccation tolerance in bryophytes relates to elasticity but is independent of cell wall thickness and photosynthesis. Physiologia Plantarum, 2022, 174, e13661.	2.6	5
2	Leaf physiological traits of plants from the Qinghai-Tibet Plateau and other arid sites in China: Identifying susceptible species and well-adapted extremophiles. Journal of Plant Physiology, 2022, 272, 153689.	1.6	7
3	Particularities of the highest elevation treeline in the world: Polylepis tarapacana Phil. as a model to study ecophysiological adaptations to extreme environments. Flora: Morphology, Distribution, Functional Ecology of Plants, 2022, 292, 152076.	0.6	3
4	Limitations to photosynthesis in bryophytes: certainties and uncertainties regarding methodology. Journal of Experimental Botany, 2022, , .	2.4	5
5	Reduced photosynthesis in <scp><i>Arabidopsis thaliana</i></scp> <i>atpme17.2</i> and <i>atpae11.1</i> mutants is associated to altered cell wall composition. Physiologia Plantarum, 2021, 172, 1439-1451.	2.6	14
6	Decreased Levels of Thioredoxin o1 Influences Stomatal Development and Aperture but Not Photosynthesis under Non-Stress and Saline Conditions. International Journal of Molecular Sciences, 2021, 22, 1063.	1.8	8
7	Resurrection plants optimize photosynthesis despite very thick cell walls by means of chloroplast distribution. Journal of Experimental Botany, 2021, 72, 2600-2610.	2.4	17
8	Chapter 3 Mesophyll Conductance to CO2 Diffusion in a Climate Change Scenario: Effects of Elevated CO2, Temperature and Water Stress. Advances in Photosynthesis and Respiration, 2021, , 49-78.	1.0	6
9	Stomatal, mesophyll and biochemical limitations to soil drought and rewatering in relation to intrinsic water-use efficiency in Manchurian ash and Mongolian oak. Photosynthetica, 2021, 59, 49-60.	0.9	6
10	Cell wall thickness and composition are involved in photosynthetic limitation. Journal of Experimental Botany, 2021, 72, 3971-3986.	2.4	71
11	Acclimation of mesophyll conductance and anatomy to light during leaf aging in <i>Arabidopsis thaliana</i> . Physiologia Plantarum, 2021, 172, 1894-1907.	2.6	14
12	Leaf anatomical characteristics are less important than leaf biochemical properties in determining photosynthesis responses to nitrogen top-dressing. Journal of Experimental Botany, 2021, 72, 5709-5720.	2.4	23
13	Differences in biochemical, gas exchange and hydraulic response to water stress in desiccation tolerant and sensitive fronds of the fern <i>Anemia caffrorum</i> . New Phytologist, 2021, 231, 1415-1430.	3.5	15
14	Dynamic changes in cell wall composition of mature sunflower leaves under distinct water regimes affect photosynthesis. Journal of Experimental Botany, 2021, 72, 7863-7875.	2.4	7
15	Cell wall thickness and composition are related to photosynthesis in Antarctic mosses. Physiologia Plantarum, 2021, 173, 1914-1925.	2.6	8
16	Adjustments in photosynthesis and leaf water relations are related to changes in cell wall composition in Hordeum vulgare and Triticum aestivum subjected to water deficit stress. Plant Science, 2021, 311, 111015.	1.7	17
17	Different Metabolic Roles for Alternative Oxidase in Leaves of Palustrine and Terrestrial Species. Frontiers in Plant Science, 2021, 12, 752795.	1.7	1
18	Cytochrome respiration pathway and sulphur metabolism sustain stress tolerance to low temperature in the Antarctic species <i>Colobanthus quitensis</i> . New Phytologist, 2020, 225, 754-768.	3.5	32

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19	Photosynthesis and photosynthetic efficiencies along the terrestrial plant's phylogeny: lessons for improving crop photosynthesis. Plant Journal, 2020, 101, 964-978.	2.8	73
20	Cell wall components regulate photosynthesis and leaf water relations of Vitis vinifera cv. Grenache acclimated to contrasting environmental conditions. Journal of Plant Physiology, 2020, 244, 153084.	1.6	32
21	Leaf functional traits and insular colonization: Subtropical islands as a melting pot of trait diversity in a widespread plant lineage. Journal of Biogeography, 2020, 47, 2362-2376.	1.4	14
22	Photosynthesis on the edge: photoinhibition, desiccation and freezing tolerance of Antarctic bryophytes. Photosynthesis Research, 2020, 149, 135-153.	1.6	21
23	From one side to two sides: the effects of stomatal distribution on photosynthesis. New Phytologist, 2020, 228, 1754-1766.	3.5	73
24	What drives photosynthesis during desiccation? Mosses and other outliers from the photosynthesis–elasticity trade-off. Journal of Experimental Botany, 2020, 71, 6460-6470.	2.4	14
25	Leaf age-dependent elastic adjustment and photosynthetic performance under drought stress in Arbutus unedo seedlings. Flora: Morphology, Distribution, Functional Ecology of Plants, 2020, 271, 151662.	0.6	10
26	It Is Hot in the Sun: Antarctic Mosses Have High Temperature Optima for Photosynthesis Despite Cold Climate. Frontiers in Plant Science, 2020, 11, 1178.	1.7	40
27	Cell wall composition and thickness affect mesophyll conductance to CO2 diffusion in <i>Helianthus annuus</i> under water deprivation. Journal of Experimental Botany, 2020, 71, 7198-7209.	2.4	27
28	Cell wall composition strongly influences mesophyll conductance in gymnosperms. Plant Journal, 2020, 103, 1372-1385.	2.8	37
29	The photosynthesis game is in the "inter-play": Mechanisms underlying CO2 diffusion in leaves. Environmental and Experimental Botany, 2020, 178, 104174.	2.0	28
30	Lowâ€ŧemperature tolerance of the Antarctic species <scp><i>Deschampsia antarctica</i></scp> : A complex metabolic response associated with nutrient remobilization. Plant, Cell and Environment, 2020, 43, 1376-1393.	2.8	21
31	Fuelling life: recent advances in photosynthesis research. Plant Journal, 2020, 101, 753-755.	2.8	15
32	Nano and Micro Unmanned Aerial Vehicles (UAVs): A New Grand Challenge for Precision Agriculture?. Current Protocols in Plant Biology, 2020, 5, e20103.	2.8	13
33	Mesophyll conductance: the leaf corridors for photosynthesis. Biochemical Society Transactions, 2020, 48, 429-439.	1.6	37
34	Recent advances in understanding and improving photosynthesis. Faculty Reviews, 2020, 9, 5.	1.7	1
35	Recent advances in understanding and improving photosynthesis. Faculty Reviews, 2020, 9, 5.	1.7	1
36	Leaf anatomy does not explain apparent shortâ€ŧerm responses of mesophyll conductance to light and CO ₂ 10 tobacco. Physiologia Plantarum, 2019, 165, 604-618	2.6	44

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37	Photosynthesis Optimized across Land Plant Phylogeny. Trends in Plant Science, 2019, 24, 947-958.	4.3	100
38	Anatomical constraints to nonstomatal diffusion conductance and photosynthesis in lycophytes and bryophytes. New Phytologist, 2019, 222, 1256-1270.	3.5	72
39	Sustainable bioenergy for climate mitigation: developing drought-tolerant trees and grasses. Annals of Botany, 2019, 124, 513-520.	1.4	23
40	Contrasting leaf porometer and infra-red gas analyser methodologies: an old paradigm about the stomatal conductance measurement. Theoretical and Experimental Plant Physiology, 2019, 31, 483-492.	1.1	10
41	Improving Estimates of Gross Primary Productivity by Assimilating Solarâ€Induced Fluorescence Satellite Retrievals in a Terrestrial Biosphere Model Using a Processâ€Based SIF Model. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3281-3306.	1.3	44
42	The apoplastic antioxidant system and altered cell wall dynamics influence mesophyll conductance and the rate of photosynthesis. Plant Journal, 2019, 99, 1031-1046.	2.8	60
43	Additive effects of high growth rate and low transpiration rate drive differences in whole plant transpiration efficiency among black poplar genotypes. Environmental and Experimental Botany, 2019, 166, 103784.	2.0	21
44	Plant pigment cycles in the high-Arctic Spitsbergen. Polar Biology, 2019, 42, 675-684.	0.5	8
45	Characterization of phenology, physiology, morphology and biomass traits across a broad Euroâ€Mediterranean ecotypic panel of the lignocellulosic feedstock <i>Arundo donax</i> . GCB Bioenergy, 2019, 11, 152-170.	2.5	21
46	A field portable method for the semiâ€quantitative estimation of dehydration tolerance of photosynthetic tissues across distantly related land plants. Physiologia Plantarum, 2019, 167, 540-555.	2.6	18
47	Variation in photosynthetic characteristics with growth form in a water-limited scenario: Implications for assimilation rates and water use efficiency in crops. Agricultural Water Management, 2019, 216, 457-472.	2.4	70
48	Allocation of the epidermis to stomata relates to stomatal physiological control: Stomatal factors involved in the evolutionary diversification of the angiosperms and development of amphistomaty. Environmental and Experimental Botany, 2018, 151, 55-63.	2.0	67
49	Differential coordination of stomatal conductance, mesophyll conductance, and leaf hydraulic conductance in response to changing light across species. Plant, Cell and Environment, 2018, 41, 436-450.	2.8	155
50	CO2 Diffusion Inside Photosynthetic Organs. Advances in Photosynthesis and Respiration, 2018, , 163-208.	1.0	22
51	Mesophyll conductance to CO2 is the most significant limitation to photosynthesis at different temperatures and water availabilities in Antarctic vascular species. Environmental and Experimental Botany, 2018, 156, 279-287.	2.0	23
52	Leaf economics spectrum in rice: leaf anatomical, biochemical, and physiological trait trade-offs. Journal of Experimental Botany, 2018, 69, 5599-5609.	2.4	38
53	Genes and gene clusters related to genotype and drought-induced variation in saccharification potential, lignin content and wood anatomical traits in Populus nigraâ€. Tree Physiology, 2018, 38, 320-339.	1.4	35
54	Physiological performance of transplastomic tobacco plants overexpressing aquaporin AQP1 in chloroplast membranes. Journal of Experimental Botany, 2018, 69, 3661-3673.	2.4	11

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55	Shade and drought growth conditions strongly impact dynamic responses of stomata to variations in irradiance in Nicotiana tabacum. Environmental and Experimental Botany, 2018, 153, 188-197.	2.0	32
56	M esophyll C onductance to CO 2 D iffusion : E ffects of D rought and O pportunities for I mprovement. , 2018, , 403-438.		26
57	Gas exchange and hydraulics during drought in crops: who drives whom?. Journal of Experimental Botany, 2018, 69, 3791-3795.	2.4	49
58	Possible link between photosynthesis and leaf modulus of elasticity among vascular plants: a new player in leaf traits relationships?. Ecology Letters, 2018, 21, 1372-1379.	3.0	55
59	Measuring Photosynthesis and Respiration with Infrared Gas Analysers. , 2018, , 51-75.		12
60	Mesophyll conductance in cotton bracts: anatomically determined internal CO2 diffusion constraints on photosynthesis. Journal of Experimental Botany, 2018, 69, 5433-5443.	2.4	24
61	A role for ecophysiology in the 'omics' era. Plant Journal, 2018, 96, 251-259.	2.8	31
62	Cellâ€level anatomical characteristics explain high mesophyll conductance and photosynthetic capacity in sclerophyllous Mediterranean oaks. New Phytologist, 2017, 214, 585-596.	3.5	104
63	Arbuscular Mycorrhizal Symbiosis with <i>Arundo donax</i> Decreases Root Respiration and Increases Both Photosynthesis and Plant Biomass Accumulation. Plant, Cell and Environment, 2017, 40, 1115-1126.	2.8	45
64	Arbuscular mycorrhizal fungus colonization in Nicotiana tabacum decreases the rate of both carboxylate exudation and root respiration and increases plant growth under phosphorus limitation. Plant and Soil, 2017, 416, 97-106.	1.8	31
65	From leaf to plant water use efficiency: solving the gaps for a whole plant evaluation. Acta Horticulturae, 2017, , 167-176.	0.1	3
66	Coordination between leaf <scp>CO</scp> ₂ diffusion and Rubisco properties allows maximizing photosynthetic efficiency in <i>Limonium</i> species. Plant, Cell and Environment, 2017, 40, 2081-2094.	2.8	29
67	Effects of Grapevine leafrollâ€associated virus 3 on the physiology in asymptomatic plants of <i>Vitis vinifera</i> . Annals of Applied Biology, 2017, 171, 155-171.	1.3	17
68	Coordinated modifications in mesophyll conductance, photosynthetic potentials and leaf nitrogen contribute to explain the large variation in foliage net assimilation rates across Quercus ilex provenances. Tree Physiology, 2017, 37, 1084-1094.	1.4	30
69	Respiratory ATP cost and benefit of arbuscular mycorrhizal symbiosis with Nicotiana tabacum at different growth stages and under salinity. Journal of Plant Physiology, 2017, 218, 243-248.	1.6	19
70	The Role of Mesophyll Conductance in Oak Photosynthesis: Among- and Within-Species Variability. Tree Physiology, 2017, , 303-325.	0.9	6
71	Leaf anatomy mediates coordination of leaf hydraulic conductance and mesophyll conductance to <scp>CO</scp> ₂ in <i>Oryza</i> . New Phytologist, 2017, 213, 572-583.	3.5	126
72	Ectopic Expression of CDF3 Genes in Tomato Enhances Biomass Production and Yield under Salinity Stress Conditions. Frontiers in Plant Science, 2017, 8, 660.	1.7	45

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73	Integrative field scale phenotyping for investigating metabolic components of water stress within a vineyard. Plant Methods, 2017, 13, 90.	1.9	37
74	Acclimation of Biochemical and Diffusive Components of Photosynthesis in Rice, Wheat, and Maize to Heat and Water Deficit: Implications for Modeling Photosynthesis. Frontiers in Plant Science, 2016, 7, 1719.	1.7	49
75	Salinity tolerance is related to cyanideâ€resistant alternative respiration in <i>Medicago truncatula</i> under sudden severe stress. Plant, Cell and Environment, 2016, 39, 2361-2369.	2.8	46
76	Unravelling the <i>inÂvivo</i> regulation and metabolic role of the alternative oxidase pathway in C ₃ species under photoinhibitory conditions. New Phytologist, 2016, 212, 66-79.	3.5	36
77	The photosynthetic capacity in 35 ferns and fern allies: mesophyll <scp>CO</scp> ₂ diffusion as a key trait. New Phytologist, 2016, 209, 1576-1590.	3.5	163
78	Genetic improvement of leaf photosynthesis and intrinsic water use efficiency in C3 plants: Why so much little success?. Plant Science, 2016, 251, 155-161.	1.7	99
79	Improving respiration measurements with gas exchange analyzers. Journal of Plant Physiology, 2016, 207, 73-77.	1.6	2
80	Mesophyll conductance to CO ₂ and Rubisco as targets for improving intrinsic water use efficiency in C ₃ plants. Plant, Cell and Environment, 2016, 39, 965-982.	2.8	186
81	Alterations in primary and secondary metabolism in <i>Vitis vinifera</i> â€~MalvasÃa de Banyalbufar' upon infection withÃGrapevine leafrollâ€associated virus 3. Physiologia Plantarum, 2016, 157, 442-452.	2.6	49
82	Effects of Grapevine Leafroll associated Virus 3 (GLRaV-3) and duration of infection on fruit composition and wine chemical profile of Vitis vinifera L. cv. Sauvignon blanc. Food Chemistry, 2016, 197, 1177-1183.	4.2	18
83	Relationships of Leaf Net Photosynthesis, Stomatal Conductance, and Mesophyll Conductance to Primary Metabolism: A Multispecies Meta-Analysis Approach. Plant Physiology, 2016, 171, 265-279.	2.3	142
84	Effects of grapevine leafroll associated virus 3 (GLRaV-3) on plant carbon balance in Vitis vinifera L. cv. GirÃ ³ Ros. Theoretical and Experimental Plant Physiology, 2016, 28, 1-10.	1.1	12
85	Leaf functional plasticity decreases the water consumption without further consequences for carbon uptake in <i>Quercus coccifera</i> L. under Mediterranean conditions. Tree Physiology, 2016, 36, 356-367.	1.4	27
86	Light acclimation of photosynthesis in two closely related firs (Abies pinsapoBoiss. andAbies) Tj ETQq0 0 0 rgBT 300-310.	Overlock 1.4	10 Tf 50 227 40
87	Differences among grapevine cultivars in their stomatal behavior and water use efficiency under progressive water stress. Agricultural Water Management, 2016, 164, 91-99.	2.4	118
88	Leaf morphological and physiological adaptations of a deciduous oak (<i>Quercus faginea</i> Lam.) to the Mediterranean climate: a comparison with a closely related temperate species (<i>Quercus) Tj ETQq0 0 0 rgI</i>	3T þQ iverlo	ck 12 Tf 50 1
89	Impaired Cyclic Electron Flow around Photosystem I Disturbs High-Light Respiratory Metabolism. Plant Physiology, 2016, 172, 2176-2189.	2.3	20
90	Trade-offs between seedling growth, plant respiration and water-use efficiency in two Mediterranean shrubs Rhamnus alaternus and Rhamnus ludovici-salvatoris. Photosynthetica, 2015, 53, 537-546.	0.9	10

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91	Harpin Hpa1 Interacts with Aquaporin PIP1;4 to Promote the Substrate Transport and Photosynthesis in Arabidopsis. Scientific Reports, 2015, 5, 17207.	1.6	50
92	UAVs challenge to assess water stress for sustainable agriculture. Agricultural Water Management, 2015, 153, 9-19.	2.4	388
93	Improving water use efficiency of vineyards in semi-arid regions. A review. Agronomy for Sustainable Development, 2015, 35, 499-517.	2.2	202
94	Plasticity of vulnerability to leaf hydraulic dysfunction during acclimation to drought in grapevines: an osmoticâ€mediated process. Physiologia Plantarum, 2015, 153, 381-391.	2.6	53
95	From leaf to whole-plant water use efficiency (WUE) in complex canopies: Limitations of leaf WUE as a selection target. Crop Journal, 2015, 3, 220-228.	2.3	358
96	Environmental stimuli and physiological responses: The current view on electrical signalling. Environmental and Experimental Botany, 2015, 114, 15-21.	2.0	91
97	Interspecific differences in temperature response of mesophyll conductance: food for thought on its origin and regulation. Plant, Cell and Environment, 2015, 38, 625-628.	2.8	29
98	Differences in water-use-efficiency between two Vitis vinifera cultivars (Grenache and Tempranillo) explained by the combined response of stomata to hydraulic and chemical signals during water stress. Agricultural Water Management, 2015, 156, 1-9.	2.4	49
99	Assessment of the role of silicon in the Cu-tolerance of the C4 grass Spartina densiflora. Journal of Plant Physiology, 2015, 178, 74-83.	1.6	47
100	Diffusional limitations explain the lower photosynthetic capacity of ferns as compared with angiosperms in a common garden study. Plant, Cell and Environment, 2015, 38, 448-460.	2.8	112
101	Modeling the Effects of Light and Sucrose on In Vitro Propagated Plants: A Multiscale System Analysis Using Artificial Intelligence Technology. PLoS ONE, 2014, 9, e85989.	1.1	59
102	Coping with low light under high atmospheric dryness: shade acclimation in a Mediterranean conifer (Abies pinsapo Boiss.). Tree Physiology, 2014, 34, 1321-1333.	1.4	12
103	Regulation of photosynthesis and stomatal and mesophyll conductance under water stress and recovery in olive trees: correlation with gene expression of carbonic anhydrase and aquaporins. Journal of Experimental Botany, 2014, 65, 3143-3156.	2.4	167
104	Limitations to soybean photosynthesis at elevated carbon dioxide in free-air enrichment and open top chamber systems. Plant Science, 2014, 226, 131-135.	1.7	30
105	Rubisco catalytic properties optimized for present and future climatic conditions. Plant Science, 2014, 226, 61-70.	1.7	41
106	Leaf respiration in darkness and in the light under pre-industrial, current and elevated atmospheric CO2 concentrations. Plant Science, 2014, 226, 120-130.	1.7	47
107	Variability of mesophyll conductance in grapevine cultivars under water stress conditions in relation to leaf anatomy and water use efficiency. Australian Journal of Grape and Wine Research, 2014, 20, 272-280.	1.0	62
108	Photosynthetic limitations in Mediterranean plants: A review. Environmental and Experimental Botany, 2014, 103, 12-23.	2.0	206

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109	Linking chlorophyll a fluorescence to photosynthesis for remote sensing applications: mechanisms and challenges. Journal of Experimental Botany, 2014, 65, 4065-4095.	2.4	770
110	Differential tissue-specific expression of NtAQP1 in Arabidopsis thaliana reveals a role for this protein in stomatal and mesophyll conductance of CO2 under standard and salt-stress conditions. Planta, 2014, 239, 357-366.	1.6	76
111	Acclimation of leaf cohorts expanded under light and water stresses: an adaptive mechanism of Eucryphia cordifolia to face changes in climatic conditions?. Tree Physiology, 2014, 34, 1305-1320.	1.4	13
112	Environmentally driven evolution of <scp>R</scp> ubisco and improved photosynthesis and growth within the <scp>C</scp> ₃ genus <i><scp>L</scp>imonium</i> (<scp>P</scp> lumbaginaceae). New Phytologist, 2014, 203, 989-999.	3.5	70
113	Biochemical acclimation, stomatal limitation and precipitation patterns underlie decreases in photosynthetic stimulation of soybean (Glycine max) at elevated [CO2] and temperatures under fully open air field conditions. Plant Science, 2014, 226, 136-146.	1.7	37
114	Impacts of rising tropospheric ozone on photosynthesis and metabolite levels on field grown soybean. Plant Science, 2014, 226, 147-161.	1.7	45
115	lsoprene emission aids recovery of photosynthetic performance in transgenic Nicotiana tabacum following high intensity acute UV-B exposure. Plant Science, 2014, 226, 82-91.	1.7	18
116	Inconsistency of mesophyll conductance estimate causes the inconsistency for the estimates of maximum rate of Rubisco carboxylation among the linear, rectangular and non-rectangular hyperbola biochemical models of leaf photosynthesis—A case study of CO2 enrichment and leaf aging effects in soybean. Plant Science, 2014, 226, 49-60.	1.7	18
117	Stomatal and mesophyll conductances to CO2 in different plant groups: Underrated factors for predicting leaf photosynthesis responses to climate change?. Plant Science, 2014, 226, 41-48.	1.7	72
118	Impacts of elevated ozone on growth and photosynthesis of Metasequoia glyptostroboides Hu et Cheng. Plant Science, 2014, 226, 182-188.	1.7	24
119	Foliar CO2 in a holm oak forest subjected to 15 years of climate change simulation. Plant Science, 2014, 226, 101-107.	1.7	20
120	Overexpression of monoubiquitin improves photosynthesis in transgenic tobacco plants following high temperature stress. Plant Science, 2014, 226, 92-100.	1.7	22
121	Expanding knowledge of the <scp>R</scp> ubisco kinetics variability in plant species: environmental and evolutionary trends. Plant, Cell and Environment, 2014, 37, 1989-2001.	2.8	155
122	Methodological advances: Using greenhouses to simulate climate change scenarios. Plant Science, 2014, 226, 30-40.	1.7	60
123	Variability of water use efficiency in grapevines. Environmental and Experimental Botany, 2014, 103, 148-157.	2.0	112
124	Opportunities for improving leaf water use efficiency under climate change conditions. Plant Science, 2014, 226, 108-119.	1.7	124
125	Lessons from crop plants struggling with salinity. Plant Science, 2014, 226, 2-13.	1.7	129
126	Mechanistic insights on the responses of plant and ecosystem gas exchange to global environmental change: Lessons from Biosphere 2. Plant Science, 2014, 226, 14-21.	1.7	18

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127	Growth, photosynthetic acclimation and yield quality in legumes under climate change simulations: An updated survey. Plant Science, 2014, 226, 22-29.	1.7	58
128	Will carbon isotope discrimination be useful as a tool for analysing the functional response of barley plants to salinity under the future atmospheric CO2 conditions?. Plant Science, 2014, 226, 71-81.	1.7	7
129	Acclimation of photosynthetic tolerance to acute heat stress at elevated CO2 and N. Plant Science, 2014, 226, 162-171.	1.7	10
130	Effects of elevated O3 exposure on seed yield, N concentration and photosynthesis of nine soybean cultivars (Glycine max (L.) Merr.) in Northeast China. Plant Science, 2014, 226, 172-181.	1.7	43
131	Variation in Rubisco content and activity under variable climatic factors. Photosynthesis Research, 2013, 117, 73-90.	1.6	123
132	Diffusional conductances to CO2 as a target for increasing photosynthesis and photosynthetic water-use efficiency. Photosynthesis Research, 2013, 117, 45-59.	1.6	305
133	Photosynthetic characterization of Rubisco transplantomic lines reveals alterations on photochemistry and mesophyll conductance. Photosynthesis Research, 2013, 115, 153-166.	1.6	23
134	A putative role for TIP and PIP aquaporins in dynamics of leaf hydraulic and stomatal conductances in grapevine under water stress and reâ€watering. Plant, Cell and Environment, 2013, 36, 828-843.	2.8	159
135	Responses of leaf night transpiration to drought stress in Vitis vinifera L Agricultural Water Management, 2013, 118, 50-58.	2.4	47
136	Photosynthetic responses of soybean (<i>Glycine max</i> L.) to heatâ€induced electrical signalling are predominantly governed by modifications of mesophyll conductance for CO ₂ . Plant, Cell and Environment, 2013, 36, 542-552.	2.8	58
137	Photosynthesis limitations in three fern species. Physiologia Plantarum, 2013, 149, 599-611.	2.6	40
138	Photosynthesis of Quercus suber is affected by atmospheric NH3 generated by multifunctional agrosystems. Tree Physiology, 2013, 33, 1328-1337.	1.4	6
139	Leaf mesophyll conductance and leaf hydraulic conductance: an introduction to their measurement and coordination. Journal of Experimental Botany, 2013, 64, 3965-3981.	2.4	189
140	Importance of leaf anatomy in determining mesophyll diffusion conductance to CO2 across species: quantitative limitations and scaling up by models. Journal of Experimental Botany, 2013, 64, 2269-2281.	2.4	348
141	Evolution of photosynthesis II: evolution and expansion of CAM and C ₄ photosynthetic types. , 2012, , 386-396.		2
142	IMPROVING WATER USE EFFICIENCY IN GRAPEVINES: AGRONOMIC AND BIOTECHNOLOGICAL APPROACHES. Acta Horticulturae, 2012, , 97-107.	0.1	2
143	WATER USE EFFICIENCY DURING DROUGHT AND RECOVERY IN GRAPEVINES: DIFFERENTIAL BEHAVIOUR OF THREE CULTIVARS. Acta Horticulturae, 2012, , 127-135.	0.1	2
144	Anisohydric behaviour in grapevines results in better performance under moderate water stress and recovery than isohydric behaviour. Plant and Soil, 2012, 359, 335-349.	1.8	111

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145	Mesophyll diffusion conductance to CO2: An unappreciated central player in photosynthesis. Plant Science, 2012, 193-194, 70-84.	1.7	563
146	The effect of strobilurins on leaf gas exchange, water use efficiency and ABA content in grapevine under field conditions. Journal of Plant Physiology, 2012, 169, 379-386.	1.6	36
147	The Response of Photosynthesis to Soil Water Stress. , 2012, , 129-144.		24
148	Average daily light interception determines leaf water use efficiency among different canopy locations in grapevine. Agricultural Water Management, 2012, 114, 4-10.	2.4	44
149	Photosynthesis under water deficits, flooding and salinity. , 2012, , 299-311.		6
150	Photosynthetic responses to biotic stress. , 2012, , 331-350.		22
151	Photosynthesis during leaf development and ageing. , 2012, , 353-372.		28
152	Special photosynthetic adaptations. , 2012, , 85-97.		2
153	Remote sensing of photosynthesis. , 2012, , 219-236.		6
154	Ecophysiology of photosynthesis in semi-arid environments. , 2012, , 448-464.		12
155	Evolution of photosynthesis I: basic leaf morphological traits and diffusion and photosynthetic structures. , 2012, , 373-385.		5
156	The <i>Péclet</i> effect on leaf water enrichment correlates with leaf hydraulic conductance and mesophyll conductance for CO ₂ . Plant, Cell and Environment, 2012, 35, 611-625.	2.8	79
157	Stomatal and non-stomatal limitations to photosynthesis in seedlings and saplings of Mediterranean species pre-conditioned and aged in nurseries: Different response to water stress. Environmental and Experimental Botany, 2012, 75, 235-247.	2.0	95
158	Water-use efficiency in grapevine cultivars grown under controlled conditions: effects of water stress at the leaf and whole-plant level. Australian Journal of Grape and Wine Research, 2012, 18, 164-172.	1.0	108
159	Carbon balance in grapevines under different soil water supply: importance of whole plant respiration. Australian Journal of Grape and Wine Research, 2012, 18, 308-318.	1.0	47
160	Leaf anatomical properties in relation to differences in mesophyll conductance to CO ₂ and photosynthesis in two related Mediterranean <i>Abies</i> species. Plant, Cell and Environment, 2012, 35, 2121-2129.	2.8	99
161	Detection of bacterial wilt infection caused by Ralstonia solanacearum in potato (Solanum) Tj ETQq1 1 0.784314 2012, 13, 236-255.	rgBT /Ov 3.1	erlock 10 Tf 17
162	Rubisco activity in Mediterranean species is regulated by the chloroplastic CO2 concentration under water stress. Journal of Experimental Botany, 2011, 62, 653-665.	2.4	141

#	Article	IF	CITATIONS
163	Evergreens favored by higher responsiveness to increased CO2. Trends in Ecology and Evolution, 2011, 26, 136-142.	4.2	115
164	PHYSIOLOGICAL AND GENETIC RESPONSE OF OLIVE LEAVES TO WATER STRESS AND RECOVERY: IMPLICATIONS OF MESOPHYLL CONDUCTANCE AND GENETIC EXPRESSION OF AQUAPORINS AND CARBONIC ANHYDRASE. Acta Horticulturae, 2011, , 99-105.	0.1	5
165	Physiological and morphological adaptations in relation to water use efficiency in Mediterranean accessions of <i>Solanum lycopersicum</i> . Plant, Cell and Environment, 2011, 34, 245-260.	2.8	152
166	<i>In vivo</i> cytochrome and alternative pathway respiration in leaves of <i>Arabidopsis thaliana</i> plants with altered alternative oxidase under different light conditions. Plant, Cell and Environment, 2011, 34, 1373-1383.	2.8	79
167	The Mediterranean evergreen Quercus ilex and the semi-deciduous Cistus albidus differ in their leaf gas exchange regulation and acclimation to repeated drought and re-watering cycles. Journal of Experimental Botany, 2011, 62, 5207-5216.	2.4	109
168	Stomatal and mesophyll conductances to CO ₂ are the main limitations to photosynthesis in sugar beet (<i>Beta vulgaris</i>) plants grown with excess zinc. New Phytologist, 2010, 187, 145-158.	3.5	134
169	Effects of drought stress and subsequent rewatering on photosynthetic and respiratory pathways in Nicotiana sylvestris wild type and the mitochondrial complex I-deficient CMSII mutant. Journal of Experimental Botany, 2010, 61, 765-775.	2.4	67
170	Applying Multifractal Analysis to Remotely Sensed Data for Assessing PYVV Infection in Potato (Solanum tuberosum L.) Crops. Remote Sensing, 2010, 2, 1197-1216.	1.8	11
171	Gas-Exchange and Chlorophyll Fluorescence Measurements in Grapevine Leaves in the Field. , 2010, , 107-121.		29
172	Drought-induced changes in development and function of grapevine (Vitis spp.) organs and in their hydraulic and non-hydraulic interactions at the whole-plant level: a physiological and molecular update. Functional Plant Biology, 2010, 37, 98.	1.1	326
173	Measuring Water Use Efficiency in Grapevines. , 2010, , 123-134.		11
174	Improving water use efficiency in grapevines: potential physiological targets for biotechnological improvement. Australian Journal of Grape and Wine Research, 2010, 16, 106-121.	1.0	235
175	Leaf mesophyll diffusion conductance in 35 Australian sclerophylls covering a broad range of foliage structural and physiological variation. Journal of Experimental Botany, 2009, 60, 2433-2449.	2.4	121
176	Influence of leaf dry mass per area, CO2, and irradiance on mesophyll conductance in sclerophylls. Journal of Experimental Botany, 2009, 60, 2303-2314.	2.4	145
177	Light-saturated photosynthetic rate in high-nitrogen rice (Oryza sativa L.) leaves is related to chloroplastic CO2 concentration. Journal of Experimental Botany, 2009, 60, 2351-2360.	2.4	154
178	Mesophyll conductance to CO2 transport estimated by two independent methods: effect of variable CO2 concentration and abscisic acid. Journal of Experimental Botany, 2009, 60, 2315-2323.	2.4	85
179	Importance of mesophyll diffusion conductance in estimation of plant photosynthesis in the field. Journal of Experimental Botany, 2009, 60, 2271-2282.	2.4	137
180	Preface. Journal of Experimental Botany, 2009, 60, 2215-2216.	2.4	11

#	Article	IF	CITATIONS
181	Triple Loss of Function of Protein Phosphatases Type 2C Leads to Partial Constitutive Response to Endogenous Abscisic Acid Â. Plant Physiology, 2009, 150, 1345-1355.	2.3	252
182	Internal conductance under different light conditions along the plant profile of Ethiopian mustard (Brassica carinata A. Brown.). Journal of Experimental Botany, 2009, 60, 2341-2350.	2.4	17
183	Differential photosynthetic performance and photoprotection mechanisms of three Mediterranean evergreen oaks under severe drought stress. Functional Plant Biology, 2009, 36, 453.	1.1	75
184	The role of mesophyll conductance during water stress and recovery in tobacco (Nicotiana) Tj ETQq0 0 0 rgBT /O	verlock 10 2.4) Tf 50 622 To 154
	Light and CO2 do not affect the mesophyll conductance to CO2 diffusion in wheat leaves. Iournal of		

185	Experimental Botany, 2009, 60, 2291-2301.	2.4	117
186	The diversity of 13C isotope discrimination in a Quercus robur full-sib family is associated with differences in intrinsic water use efficiency, transpiration efficiency, and stomatal conductance. Journal of Experimental Botany, 2009, 60, 2419-2431.	2.4	69
187	Seasonal time-course of gradients of photosynthetic capacity and mesophyll conductance to CO2 across a beech (Fagus sylvatica L.) canopy. Journal of Experimental Botany, 2009, 60, 2407-2418.	2.4	63
188	Variability in water use efficiency at the leaf level among Mediterranean plants with different growth forms. Plant and Soil, 2009, 317, 17-29.	1.8	130
189	Changes of alternative oxidase activity, capacity and protein content in leaves of <i>Cucumis sativus</i> wildâ€ŧype and MSC16 mutant grown under different light intensities. Physiologia Plantarum, 2009, 137, 419-426.	2.6	38
190	Photosynthesis under drought and salt stress: regulation mechanisms from whole plant to cell. Annals of Botany, 2009, 103, 551-560.	1.4	2,950
191	Interactive effects of soil water deficit and air vapour pressure deficit on mesophyll conductance to CO2 in Vitis vinifera and Olea europaea. Journal of Experimental Botany, 2009, 60, 2391-2405.	2.4	100
192	Leaf gas exchange, carbon isotope discrimination, and grain yield in contrasting rice genotypes subjected to water deficits during the reproductive stage. Journal of Experimental Botany, 2009, 60, 2325-2339.	2.4	204
193	The impact of blue light on leaf mesophyll conductance. Journal of Experimental Botany, 2009, 60, 2283-2290.	2.4	88
194	Seasonal and inter-annual variations of gas exchange in thirteen woody species along a climatic gradient in the Mediterranean island of Mallorca. Flora: Morphology, Distribution, Functional Ecology of Plants, 2009, 204, 169-181.	0.6	37
195	Resistances along the CO2 diffusion pathway inside leaves. Journal of Experimental Botany, 2009, 60, 2235-2248.	2.4	492
196	Estimating mesophyll conductance to CO2: methodology, potential errors, and recommendations. Journal of Experimental Botany, 2009, 60, 2217-2234.	2.4	289
197	Photosynthesis limitations during water stress acclimation and recovery in the drought-adapted Vitis hybrid Richter-110 (V. berlandieri×V. rupestris). Journal of Experimental Botany, 2009, 60, 2361-2377.	2.4	294
198	Role of mesophyll diffusion conductance in constraining potential photosynthetic productivity in the field. Journal of Experimental Botany, 2009, 60, 2249-2270.	2.4	271

#	Article	IF	CITATIONS
199	Photochemistry, remotely sensed physiological reflectance index and de-epoxidation state of the xanthophyll cycle in Quercus coccifera under intense drought. Oecologia, 2008, 156, 1-11.	0.9	117

200 Phytochromeâ \in driven changes in respiratory electron transport partitioning in soybean (<i>Slycine) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5

201	Adjustments of water use efficiency by stomatal regulation during drought and recovery in the droughtâ€edapted <i>Vitis</i> hybrid Richterâ€110 (<i>V.</i> â€f <i>berlandieri</i> â€f×â€f <i>V.</i> â€f <i>ru Physiologia Plantarum, 2008, 134, 313-323.</i>	pestoris).124
202	Mesophyll conductance to CO ₂ : current knowledge and future prospects. Plant, Cell and Environment, 2008, 31, 602-621.	2.8	926
203	Aquaporins and plant water balance. Plant, Cell and Environment, 2008, 31, 658-666.	2.8	256
204	Mercurial inhibition of root hydraulic conductance in Vitis spp. rootstocks under water stress. Environmental and Experimental Botany, 2008, 63, 178-182.	2.0	51
205	Analysis of leakage in IRGA's leaf chambers of open gas exchange systems: quantification and its effects in photosynthesis parameterization. Journal of Experimental Botany, 2007, 58, 1533-1543.	2.4	226
206	Response of leaf respiration to water stress in Mediterranean species with different growth forms. Journal of Arid Environments, 2007, 68, 206-222.	1.2	86
207	Effect of mitochondrial genome rearrangement on respiratory activity, photosynthesis, photorespiration and energy status of MSC16 cucumber (Cucumis sativus) mutant. Physiologia Plantarum, 2007, 131, 527-541.	2.6	62
208	Photoprotection processes under water stress and recovery in Mediterranean plants with different growth forms and leaf habits. Physiologia Plantarum, 2007, 130, 495-510.	2.6	63
209	Rapid variations of mesophyll conductance in response to changes in CO ₂ concentration around leaves. Plant, Cell and Environment, 2007, 30, 1284-1298.	2.8	486
210	Photosynthetic limitations in response to water stress and recovery in Mediterranean plants with different growth forms. New Phytologist, 2007, 175, 81-93.	3.5	462
211	Mesophyll conductance to CO 2 in Arabidopsis thaliana. New Phytologist, 2007, 175, 501-511.	3.5	138
212	Photosynthesis and photoinhibition in response to drought in a pubescent (var. minor) and a glabrous (var. palaui) variety of Digitalis minor. Environmental and Experimental Botany, 2007, 60, 105-111.	2.0	59
213	Photosynthesis and photoprotection responses to water stress in the wild-extinct plant Lysimachia minoricensis. Environmental and Experimental Botany, 2007, 60, 308-317.	2.0	61
214	Water relations and stomatal characteristics of Mediterranean plants with different growth forms and leaf habits: responses to water stress and recovery. Plant and Soil, 2007, 290, 139-155.	1.8	277
215	Aquaporin expression in response to different water stress intensities and recovery in Richter-110 (Vitis sp.): relationship with ecophysiological status. Planta, 2007, 226, 671-681.	1.6	170
216	FLuorescence EXplorer (FLEX): an optimised payload to map vegetation photosynthesis from space. , 2006, , .		9

#	Article	IF	CITATIONS
217	Keeping a positive carbon balance under adverse conditions: responses of photosynthesis and respiration to water stress. Physiologia Plantarum, 2006, 127, 343-352.	2.6	601
218	Decreased Rubisco activity during water stress is not induced by decreased relative water content but related to conditions of low stomatal conductance and chloroplast CO 2 concentration. New Phytologist, 2006, 172, 73-82.	3.5	359
219	Tobacco aquaporin NtAQP1 is involved in mesophyll conductance to CO2inÂvivo. Plant Journal, 2006, 48, 427-439.	2.8	384
220	Acclimation of Rubisco specificity factor to drought in tobacco: discrepancies between in vitro and in vivo estimations. Journal of Experimental Botany, 2006, 57, 3659-3667.	2.4	60
221	Rubisco specificity factor tends to be larger in plant species from drier habitats and in species with persistent leaves. Plant, Cell and Environment, 2005, 28, 571-579.	2.8	241
222	Prospects for crop production under drought: research priorities and future directions. Annals of Applied Biology, 2005, 147, 211-226.	1.3	216
223	Modulation of relative growth rate and its components by water stress in Mediterranean species with different growth forms. Oecologia, 2005, 145, 21-31.	0.9	73
224	Effects of Water Stress on Respiration in Soybean Leaves. Plant Physiology, 2005, 139, 466-473.	2.3	245
225	Physiological tools for irrigation scheduling in grapevine (Vitis vinifera L.). Agriculture, Ecosystems and Environment, 2005, 106, 159-170.	2.5	265
226	The Effects of Water Stress on Plant Respiration. , 2005, , 85-94.		67
227	Effect of water stress on partitioning of 14C-labelled photosynthates in Vitis vinifera. Functional Plant Biology, 2004, 31, 697.	1.1	40
228	Is photosynthesis limited by decreased Rubisco activity and RuBP content under progressive water stress?. New Phytologist, 2004, 162, 671-681.	3.5	400
229	Understanding down-regulation of photosynthesis under water stress: future prospects and searching for physiological tools for irrigation management. Annals of Applied Biology, 2004, 144, 273-283.	1.3	240
230	The worldwide leaf economics spectrum. Nature, 2004, 428, 821-827.	13.7	6,489
231	Diffusive and Metabolic Limitations to Photosynthesis under Drought and Salinity in C 3 Plants. Plant Biology, 2004, 6, 269-279.	1.8	1,095
232	A new instrument for passive remote sensing: 2. Measurement of leaf and canopy reflectance changes at 531 nm and their relationship with photosynthesis and chlorophyll fluorescence. Remote Sensing of Environment, 2004, 91, 175-185.	4.6	165
233	A new instrument for passive remote sensing1. Measurements of sunlight-induced chlorophyll fluorescence. Remote Sensing of Environment, 2004, 91, 186-197.	4.6	199
234	Analysis of the virusâ€induced inhibition of photosynthesis in malmsey grapevines. New Phytologist, 2003, 160, 403-412.	3.5	81

#	Article	IF	CITATIONS
235	A ten-year study on the physiology of two Spanish grapevine cultivars under field conditions: effects of water availability from leaf photosynthesis to grape yield and quality. Functional Plant Biology, 2003, 30, 607.	1.1	228
236	Relationship between Maximum Leaf Photosynthesis, Nitrogen Content and Specific Leaf Area in Balearic Endemic and Nonâ€endemic Mediterranean Species. Annals of Botany, 2003, 92, 215-222.	1.4	84
237	Energy dissipation in C3 plants under drought. Functional Plant Biology, 2002, 29, 1209.	1.1	187
238	Effects of drought on light-energy dissipation mechanisms in high-light-acclimated, field-grown grapevines. Functional Plant Biology, 2002, 29, 1197.	1.1	69
239	Effects of drought on photosynthesis in grapevines under field conditions: an evaluation of stomatal and mesophyll limitations. Functional Plant Biology, 2002, 29, 461.	1.1	567
240	Photosynthetic responses to water deficit in six Mediterranean sclerophyll species: possible factors explaining the declining distribution of Rhamnus ludovici-salvatoris, an endemic Balearic species. Tree Physiology, 2002, 22, 687-697.	1.4	127
241	Regulation of Photosynthesis of C3 Plants in Response to Progressive Drought: Stomatal Conductance as a Reference Parameter. Annals of Botany, 2002, 89, 895-905.	1.4	795
242	Steady-state chlorophyll fluorescence (Fs) measurements as a tool to follow variations of net CO2 assimilation and stomatal conductance during water-stress in C3 plants. Physiologia Plantarum, 2002, 114, 231-240.	2.6	269
243	Drought-inhibition of Photosynthesis in C3 Plants: Stomatal and Non-stomatal Limitations Revisited. Annals of Botany, 2002, 89, 183-189.	1.4	1,197
244	Seasonal patterns and control of gas exchange in local populations of the Mediterranean evergreen shrub Pistacia lentiscus L Acta Oecologica, 2001, 22, 33-43.	0.5	90
245	Adaptation of a PAM-fluorometer for remote sensing of chlorophyll fluorescence. Photosynthesis Research, 2001, 68, 113-120.	1.6	33
246	Genetic variability of photosynthesis and water use in Balearic grapevine cultivars. Annals of Applied Biology, 2001, 138, 353-361.	1.3	127
247	Photoinactivation of photosystem II in high light-acclimated grapevines. Functional Plant Biology, 2001, 28, 755.	1.1	18
248	Steady-State and Maximum Chlorophyll Fluorescence Responses to Water Stress in Grapevine Leaves. Remote Sensing of Environment, 2000, 73, 283-297.	4.6	168
249	COMPARISON OF HEAT BALANCE AND GAS EXCHANGE METHODS TO MEASURE TRANSPIRATION IN IRRIGATED AND WATER STRESSED GRAPEVINES. Acta Horticulturae, 2000, , 145-156.	0.1	4
250	Stomatal and non-stomatal limitations of photosynthesis under water stress in field-grown grapevines. Functional Plant Biology, 2000, 27, 87.	1.1	63
251	Analysis of the Relative Increase in Photosynthetic O2 Uptake When Photosynthesis in Grapevine Leaves Is Inhibited following Low Night Temperatures and/or Water Stress. Plant Physiology, 1999, 121, 675-684.	2.3	130
252	Water stress induces different levels of photosynthesis and electron transport rate regulation in grapevines. Plant, Cell and Environment, 1999, 22, 39-48.	2.8	256

#	Article	IF	CITATIONS
253	EFFECT OF MODERATE IRRIGATION ON AROMA POTENTIAL AND OTHER MARKERS OF GRAPE QUALITY. Acta Horticulturae, 1999, , 261-268.	0.1	8
254	Stomatal and non-stomatal limitations of photosynthesis under water stress in field-grown grapevines. Functional Plant Biology, 1999, 26, 421.	1.1	130
255	CONTRIBUTION OF DIFFERENT LEVELS OF PLANT CANOPY TO TOTAL CARBON ASSIMILATION AND INTRINSIC WATER USE EFFICIENCY OF MANTO NEGRO AND TEMPRANILLO GRAPEVINES. Acta Horticulturae, 1999, , 141-148.	0.1	7
256	Down-regulation of photosynthesis by drought under field conditions in grapevine leaves. Functional Plant Biology, 1998, 25, 893.	1.1	110
257	Continuous Chlorophyll Fluorescence and Gas Exchange Measurements as A New Approach to Study Water Stress Effects on Leaf Photosynthesis. , 1998, , 4305-4308.		4
258	Water Stress Effects on Variations of Steady-State Chlorophyll Fluorescence (Fs) in Response to Light. , 1998, , 2589-2593.		0
259	Variation in leaf longevity of Pistacia lentiscus and its relationship to sex and drought stress inferred from leaf delta13C. Functional Ecology, 1997, 11, 282-289.	1.7	40
260	Possible approaches to remote sensing of photosynthetic activity. , 0, , .		3
261	Gas-exchange analysis: basics and problems. , 0, , 115-130.		1
262	Photosynthetic water-use efficiency., 0,, 523-536.		2
263	Terrestrial photosynthesis in a changing environment. , 0, , 1-6.		1
264	Mesophyll conductance to CO2. , 0, , 169-185.		26
265	Leaf morpho-physiological comparison between native and non-native plant species in a Mediterranean island. Biological Invasions, 0, , .	1.2	0
266	Effect of seawater salinity stress on Sporobolus pungens (Schreb.) Kunth, a halophytic grass of the mediterranean embryonic dunes. Plant Growth Regulation, 0, , .	1.8	1